

WHAT IS CLAIMED IS:

1. For use in a wireless network, a base station capable of releasing a call between said base station and a mobile station, said base station comprising:

a preamble frame detector capable of detecting preamble frames transmitted to said base station by said mobile station; and

a transmit power controller capable of adjusting a power level of null frames transmitted by said base station.

2. The base station as set forth in Claim 1 wherein said preamble frame detector of said base station is capable of detecting at least one missing preamble frame from said mobile station; and

wherein in response to said detection of said at least one missing preamble frame from said mobile station, said transmit power controller increases a power level of null frames transmitted by said base station.

3. The base station as set forth in Claim 2 wherein said transmit power controller increases said power level of null frames by a step size having a configurable value.

4. The base station as set forth in Claim 2 wherein said base station further comprises:

a fade timer having a configurable value;

wherein said base station starts said fade timer when said preamble frame detector detects at least one missing preamble frame from said mobile station; and

wherein said base station stops sending said null frames to said mobile station when said preamble frame detector detects at least one missing preamble frame from said mobile station.

5. The base station as set forth in Claim 4 wherein said base station releases said call between said base station and said mobile station when one of: said fade timer expires and a maximum power level for said null frames is exceeded.

6. The base station as set forth in Claim 4 wherein said configurable value of said fade timer is less than five seconds.

7. A wireless network comprising a plurality of base stations, each of said plurality of base stations capable of releasing a call between said base station and a mobile station, wherein said each base station comprises:

a preamble frame detector capable of detecting preamble frames transmitted to said base station by said mobile station; and

a transmit power controller capable of adjusting a power level of null frames transmitted by said base station.

8. The wireless network as set forth in Claim 7 wherein said preamble frame detector of said each base station is capable of detecting at least one missing preamble frame from said mobile station; and

wherein in response to said detection of said at least one missing preamble frame from said mobile station, said transmit power controller increases a power level of null frames transmitted by said base station.

9. The wireless network as set forth in Claim 8 wherein said transmit power controller increases said power level of null frames by a step size having a configurable value.

10. The wireless network as set forth in Claim 8 wherein said each base station further comprises:

a fade timer having a configurable value;

wherein said each base station starts said fade timer when said preamble frame detector detects at least one missing preamble frame from said mobile station; and

wherein said each base station stops sending said null frames to said mobile station when said preamble frame detector detects at least one missing preamble frame from said mobile station.

11. The wireless network as set forth in Claim 10 wherein said each base station releases said call between said each base station and said mobile station when one of: said fade timer expires and a maximum power level for said null frames is exceeded.

12. The wireless network as set forth in Claim 10 wherein said configurable value of said fade timer is less than five seconds.

13. For use in a wireless network, a method of operating a base station, the method comprising the steps of:

transmitting null frames from said base station to a mobile station;

detecting in a preamble frame detector of said base station preamble frames from said mobile station; and

adjusting a power level of said null frames transmitted to said mobile station by said base station.

14. The method as set forth in Claim 13 further comprising the steps of:

detecting at least one missing preamble frame from said mobile station; and

in response to said detection of said at least one missing preamble frame from said mobile station, increasing a power level of null frames transmitted by said base station.

15. The method as set forth in Claim 14 wherein said power level of said null frames is increased by a step size having a configurable value.

16. The method as set forth in Claim 14 further comprising the steps of:

providing in said base station a fade timer that has a configurable value;

starting said fade timer when said preamble frame detector detects at least one missing preamble frame from said mobile station; and

stopping a transmission of said null frames to said mobile station when said preamble frame detector detects at least one missing preamble frame from said mobile station.

17. The method as set forth in Claim 16 further comprising the step of:

releasing a call between said base station and said mobile station when one of: said fade timer expires and a maximum power level for said null frames is exceeded.

18. The method as set forth in Claim 16 wherein said configurable value of said fade timer is less than five seconds.

19. For use in a wireless network, a mobile station capable of releasing a call between said mobile station and a base station, said mobile station comprising:

a main processor;

a null frame monitor program capable of detecting null frames transmitted to said mobile station by said base station; and

a transmit power control program capable of adjusting a power level of preamble frames transmitted by said mobile station.

20. The mobile station as set forth in Claim 19 wherein said null frame monitor program of said mobile station is capable of detecting at least one missing null frame from said base station; and

wherein in response to said detection of said at least one missing null frame from said base station, said transmit power control program increases a power level of preamble frames transmitted by said mobile station.

21. The base station as set forth in Claim 20 wherein said transmit power control program increases said power level of said preamble frames by a step size having a configurable value.

22. The mobile station as set forth in Claim 20 wherein said mobile station further comprises:

a fade timer having a configurable value;

wherein said mobile station starts said fade timer when said null frame monitor program detects at least one missing null frame from said base station; and

wherein said mobile station increases power to said preamble frames in relation to a detected number of missing null frames when said null frame monitor program detects missing null frames from said base station.

23. The mobile station as set forth in Claim 22 wherein said mobile station releases said call between said mobile station and said base station when one of: said fade timer expires and a maximum power level for said preamble frames is exceeded.

24. The mobile station as set forth in Claim 22 wherein said configurable value of said fade timer is less than five seconds.

25. For use in a wireless network, a method of operating a mobile station, the method comprising the steps of:

transmitting preamble frames from said mobile station to a base station;

detecting in a null frame monitor program of said mobile station null frames from said base station; and

adjusting a power level of said preamble frames transmitted to said base station by said mobile station.

26. The method as set forth in Claim 25 further comprising the steps of:

detecting at least one missing null frame from said base station; and

in response to said detection of said at least one missing null frame from said base station, increasing a power level of preamble frames transmitted by said mobile station.

27. The method as set forth in Claim 26 wherein said power level of said preamble frames is increased by a step size having a configurable value.

28. The method as set forth in Claim 26 further comprising the steps of:

providing in said mobile station a fade timer that has a configurable value;

starting said fade timer when said null frame monitor program detects at least one missing null from said base station; and

increasing power to said preamble frames in relation to a detected number of missing null frames when said null frame monitor program detects missing null frames from said base station.

29. The method as set forth in Claim 28 further comprising the step of:

releasing a call between said mobile station and said base station when one of: said fade timer expires and a maximum power level for said preamble frames is exceeded.

30. The method as set forth in Claim 28 wherein said configurable value of said fade timer is less than five seconds.